

REMARKS/ARGUMENTS

Claims 1-8 remain in this application.

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5). A corrected drawing sheet is provided that includes the referenced signs mentioned in the description: 32 (pg. 3, line 30) and 34 (pg. 3, line 31).

Claim 7 was objected to for informality in use of the acronym "RCL." Claim 7 has been amended to expand the acronym "RCL."

Rejection Under 35 USC § 103(a)

Claims 1-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 5,814,195 to Lehan et al. in view of US 6,563,076 B1 to Benjamin et al. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure." MPEP § 706.02(j) (citing *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

With respect to claims 1 and 6, according to the Examiner, it would have been obvious to modify the invention of Lehan to utilize a balancing circuit as taught by Benjamin. The combination of Lehan and Benjamin, however, does not teach or suggest all of the claim limitations of claims 1 and 6. Benjamin teaches an RF sensor comprising a balancing circuit that balances the AC component of a low voltage AC signal before it is amplified and further processed for use as a feedback command to control an RF generator (col. 4, lines 22-48). Benjamin does not teach or suggest, however, that the balancing circuit allows a power supply to deliver equal *power* to each of two target

materials in a coating chamber, as required by claims 1 and 6. Hence, a *prima facie* case of obviousness cannot be based on the combination of Lehan and Benjamin.

Moreover, the combination of Lehan and Benjamin discloses neither a suggestion nor motivation to modify or combine the reference teachings, or a reasonable expectation of success. According to the Examiner, Benjamin discloses that the balancing circuit of Benjamin "ensures that the AC signal is symmetrically loaded about the zero volt axis ensuring that the signal does not generate spurious DC components." The purpose of the balancing circuit Benjamin is to avoid inducing *error* into an RF sensor system (col. 4, line 31), which is a different problem from that solved by the invention. The purpose of the balancing circuit of the invention is to allow a power supply to deliver equal power to each of two target materials in a coating chamber. The combination of Lehan and Benjamin does not disclose or suggest a motivation to use the balancing circuit of Benjamin for this claimed purpose, and in fact teaches away from that use. As stated in Benjamin, the plasma reactor apparatus disclosed is expressly intended to operate with a net DC bias delivered to the workpiece (col. 4, lines 8-10), which is essential for achieving the intended process results (*id.* line 12). Hence, there would be no motivation to use the balancing circuit of Benjamin for eliminating DC components at the workpiece, because it would render the apparatus of Benjamin unsatisfactory for its intended purpose. See MPEP § 2143.01.


With respect to the additional claim limitations of claims 2, 3, 4, 5, 7, and 8, according to the Examiner, Figure 3 of Benjamin shows the limitations. Figure 3 of Benjamin shows generally an RF sensor comprising a balancing circuit. Nowhere in Figure 3, however, or in any accompanying text does Benjamin disclose, either expressly or implicitly, a balancing circuit that (1) comprises a variable resistor, as required by claim 2; (2) causes a deliberate unbalance of power, as required by claims 3 and 8; or (3) comprises a parallel RCL circuit, as required by claim 7. Moreover, Benjamin does not disclose a balancing circuit comprising a variable resistor implemented as either a transistor operated linearly, as required by claim 4, or a boost converter, as required by claim 5. Hence, a *prima facie* case of obviousness as to these claims cannot be based on the combination of Lehan and Benjamin.

In view of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Dated this 7th day of June, 2005.

Respectfully submitted,

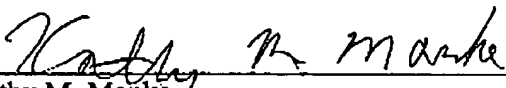
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CERTIFICATE OF TRANSMISSION

I hereby certify that this Amendment and Request for Consideration is being facsimile transmitted to the United States Patent and Trademark Office, fax no. (703) 872-9306 on June 7, 2005.



Kathy M. Manke